



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/754,893	01/05/2001	Charles A. Kunzinger	RSW920000162US1	4799

7590 06/25/2004
Gerald R. Woods
IBM Corporation T81/503
P O Box 12195
Research Triangle Park, NC 27709

EXAMINER

SONG, HOSUK

ART UNIT PAPER NUMBER

2135

DATE MAILED: 06/25/2004

3

Please find below and/or attached an Office communication concerning this application or proceeding.

St

Office Action Summary

Application No.

09/754,893

Applicant(s)

KUNZINGER, CHARLES A.

Examiner

Hosuk Song

Art Unit

2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9, 11-21, 25-35, 37 and 39-42 is/are rejected.
- 7) ☒ Claim(s) 8, 10, 22-24, 36 and 38 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-3,5-7,11-17,19-21,25-31,33-35,39-42 are rejected under 35 U.S.C. 102(e) as being anticipated by Liu(US 6,079,202).

Claim 1: Liu disclose a computer program product for providing end-to-end protection for datagrams in a computer networking environment(fig.1,4), the computer program product embodied one or more computer-readable media and comprising computer readable program code for independently securing each of a plurality of network segments that comprise a network path from a datagram originator to a datagram destination in (fig.1,2.col.6,lines 59-65)., while each one or more gateways in the network path retains cleartext access to datagrams sent on the network path in (col.6,lines 66-67;col.7,lines 1-3).

Claims 2,11-13: Liu disclose computer-readable program code means for protecting each of a plurality of network segments that comprise a network path from a datagram originator to a datagram destination and computer readable medium code means for establishing a first protected network segment from the datagram originator to a first gateway in the network path in (col.5,lines 45-50;col.8,lines 1-10). Liu disclose computer readable program code for cascading zero or more protected gateway-to-gateway segments from the gateway to each of zero or more successive gateways in the network path and cascading a last protected network

segment from a final one of the gateways to the datagram destination, wherein the final gateway may be identical to the first gateway if no gateway-to-gateway segments are required, wherein the first gateway and each of the zero or more successive gateways retains cleartext access to datagrams sent on the network path in (fig. 1 and col. 9, lines 29-58).

Claim 3: Liu disclose computer readable program code means for establishing security associations which use strong cryptographic techniques in (col. 6, lines 59-63).

Claims 5-7: Liu disclose using identifying information from the first protected network segment as identifying of the protected gateway-to-gateway segments and the protected final network segment in (fig. 1 and col. 9, lines 3-12, 17-26).

Claim 14: Liu disclose identifying information may be altered by zero or more of the gateways in (col. 9, lines 29-58).

Claim 15: Liu disclose independently securing each of a plurality of network segments that comprise a network path from a first computer to a second computer, wherein a datagram originator at the first computer sends at least one datagram to a datagram destination at the second computer, while each of one or more gateways in the network path retains cleartext access to datagrams sent on the network path in (fig. 1, 2, col. 6, lines 59-65 and col. 6, lines 66-67; col. 7, lines 1-3).

Claims 16, 25-27: Liu disclose protecting each of a plurality of network segments that comprise a network path from a datagram originator to a datagram destination and establishing a first protected network segment from the datagram originator to a first gateway in the network path in (col. 5, lines 45-50; col. 8, lines 1-10). Liu disclose cascading zero or more protected gateway-to-gateway segments from the first gateway to each of zero or more successive gateways in the network path and cascading a last protected network segment from a final one of the gateways to the datagram destination, wherein the final gateway may be identical to the

first gateway if no gateway –to-gateway segments are required wherein the first gateway and each of the zero or more successive gateways retains cleartext access to datagrams sent on the network path in (fig.1 and col.9,lines 29-58).

Claim 17: Liu disclose computer readable program code means for establishing security associations which use strong cryptographic techniques in (col.6,lines 59-63).

Claims 19-21: Liu disclose using identifying information from the first protected network segment as identifying of the protected gateway-to-gateway segments and the protected final network segment in (fig.1 and col.9,lines 3-12,17-26).

Claim 28: Liu disclose identifying information may be altered by zero or more of the gateways in (col.9,lines 29-58).

Claim 29; see claim rejection 15 above.

Claims 30,39-41: Liu disclose protecting each of a plurality of network segments that comprise a network path from a datagram originator to a datagram destination and establishing a first protected network segment from the datagram originator to a first gateway in the network path in (col.5,lines 45-50;col.8,lines 1-10). Liu disclose cascading zero or more protected gateway-to-gateway segments from the first gateway to each of zero or more successive gateways in the network path and cascading a last protected network segment from a final one of the gateways to the datagram destination, wherein the final gateway may be identical to the first gateway if no gateway –to-gateway segments are required wherein the first gateway and each of the zero or more successive gateways retains cleartext access to datagrams sent on the network path in (fig.1 and col.9,lines 29-58).

Claim 31: Liu disclose computer readable program code means for establishing security associations which use strong cryptographic techniques in (col.6,lines 59-63).

Art Unit: 2135

Claim 33-35: Liu disclose using identifying information from the first protected network segment as identifying of the protected gateway-to-gateway segments and the protected final network segment in (fig.1 and col.9,lines 3-12,17-26).

Claim 42: Liu disclose identifying information may be altered by zero or more of the gateways in (col.9,lines 29-58).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 4,9,17,18,32,37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu(US 6,079,202) in view of Ellis(US 6,484,257).

Claims 4,9,17,18,32,37: Liu does not specifically disclose Internet Key exchange. Ellis' patent discloses IKE in (col.3,lines 30-38). It would have been obvious to person of ordinary skill in the art at the time invention was made to employ IKE as taught in Ellis with network security system of Liu so that keys can be shared and protected against hackers thus enhancing security of its data and system.

Allowable Subject Matter

3. Claims 8,10,22,23,24,36,38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion


4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Presttun (US 5,115,466)
- b. Sistanizadeh et al.(US 5,790,548).
- c. Boden et al.(US 6,330,562)

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hosuk Song whose telephone number is 703-305-0042. The examiner can normally be reached on Tue-Fri from 6:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 703-305-4393. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



HS